

Exhibit D



Aruba Campus switches: Latest enhancements

#ArubaAirheads

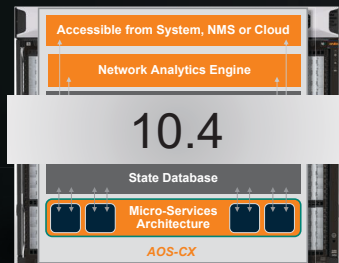
ARUBA CX SWITCHING

NEW INNOVATIONS

MODERN PORTFOLIO DESIGNED FOR THE NETWORK OPERATOR

AOS-CX

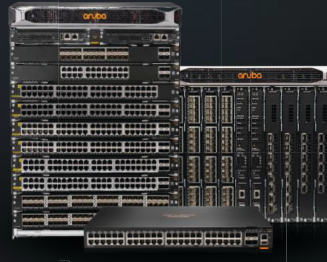
ENHANCED



5th major release extends cloud-native software to campus access

CX 6300 and CX 6400 Series Switches

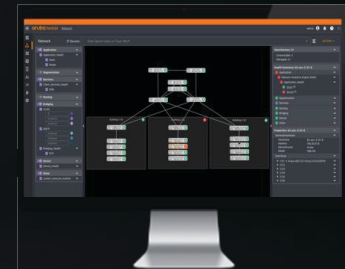
NEW



Next-gen chassis & stackable switches with differentiation at every layer

NetEdit 2.0 with NAE Integration

ENHANCED



Advanced analytics and intelligent configuration workflows for operational simplicity



UNDER THE HOOD: ARUBA GEN7 ASIC ARCHITECTURE

MORE INNOVATION, PERFORMANCE, AND EFFICIENCY



Faster Innovation

Tight integration between hardware and software gets new capabilities to market faster



Non-Blocking Performance

High-performance VoQ capability prevents head-of-line blocking, optimizing use of all ports



Flexible Programmability

Dynamic programming of network resources for use case optimization

30+

Years of IP

7th

Generation Architecture

3

New ASICs

Aruba Gen7 ASIC Architecture

More innovation, performance, and efficiency

880Gbps

- 24p SFP+ 4SFP56
- 600Gbps Fabric connectivity



- ✓ Virtual Output Queue
- ✓ Investment Protection
- ✓ Deployable at Enterprise and Data Center
- ✓ Programmable, TCAM reallocation without a reset
- ✓ Flexible forwarding table
- ✓ High performance

3.3B
Transistors

2.8Tbps

- 10G/25G SFP28, 12p 40G/100G
- 2.8Tbps Fabric connectivity



10.5B
Transistors



One Operating System. One ASIC Architecture. One Operating Model

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VOQ: Virtual Output Queueing

Why it is important

- Device level
 - HOL congestion is avoided
 - Congestion avoidance and management and prioritization are applied as early as possible (instead of the egress port)
 - Allows for deeper queues
 - Fabrics utilization is optimized

- Network level
 - Optimized forwarding
 - Full switch capacity utilization
 - Deeper buffers to handle large traffic bursts
 - Better QoS

ArubaOS-CX Access at Launch: Compelling Differentiators + Parity

Category	Features
Layer 1	Auto-negotiation, POE/POE+, IEEE 802.3bt/60W, Always-on POE, IEEE 802.3bz - SmartRate/Multi-Gig, 1/2.5/5/10/25/50G Transceivers, Bluetooth Dongle Support with BLE
Layer 2/ Bridging	STP, Root Guard, Loop Guard, MSTP, RSTP, RPVST+, BPDU Filtering, Loop Protect, LAG /LACP, MVRP, LLDP, LLDP- MED, support over OOBM, CDP, LLDP Bypass, Unidirectional Link detection (UDLD), Voice VLAN
Layer 3/Routing	Static routing, OSPFv2/v3, VRRPv3, Policy Based Routing (PBR), Bidirectional Forwarding Detection (BFD) for supported unicast routing protocols, MP-BGP, BGP EVPN
High Availability	VSF Stacking (Stackable), In-Chassis HA , VSX –Virtual Switching Extension (Chassis), VSX Live Upgrades, OS Resiliency, Time-Series Database
Multicast	IGMPv3, MLDv2, PIM-SM, PIM-DM, Multicast Source Discovery Protocol (MSDP), Anycast RP with MSDP
Security	IEEE 802.1x, MACAuth, RADIUS/TACACS+, Port Security, RBAC, IPv4/IPv6 ACL, DHCP/ND Snooping, RA Guard, Dynamic ARP Protection, Local and Downloadable User Roles, Critical and Open Auth. role, ClearPass Support, Captive Portal, Secure Boot, Multicast Storm Control
QoS	802.1p, Strict Priority Queuing, Marking & Re-marking, DWRR, Broadcast/Multicast/Unicast Rate Limiting, Classifier-based QoS, Traffic Templates, CoPP, Port & Remote Mirroring
Management & Usability/ Operator Experience	DHCP v4/v6 Server, DHCP v4/v6 Relay, DNS v4/v6 client, Syslog v4/v6 client, Fastboot, NTP Server, RMON/SFTP/SSH, SNMP, Device Profile, Local/Remote Mirroring, IP SLA, Web GUI, sFlow, Native REST API programmability, NetEdit - Config automation/verification/validation, Network verification/validation, Easy Provisioning (ZTP/OTP), Airwave and Central Support, Network Analytics Engine, NAE- NetEdit Integration
Segmentation	L2 VXLAN, L3 VXLAN, VRF-Lite, L3 GRE, Dynamic Segmentation (User Based Tunnels)



Orange - Differentiation w.r.t to AOS-S and/or competition

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Network Analytics Engine

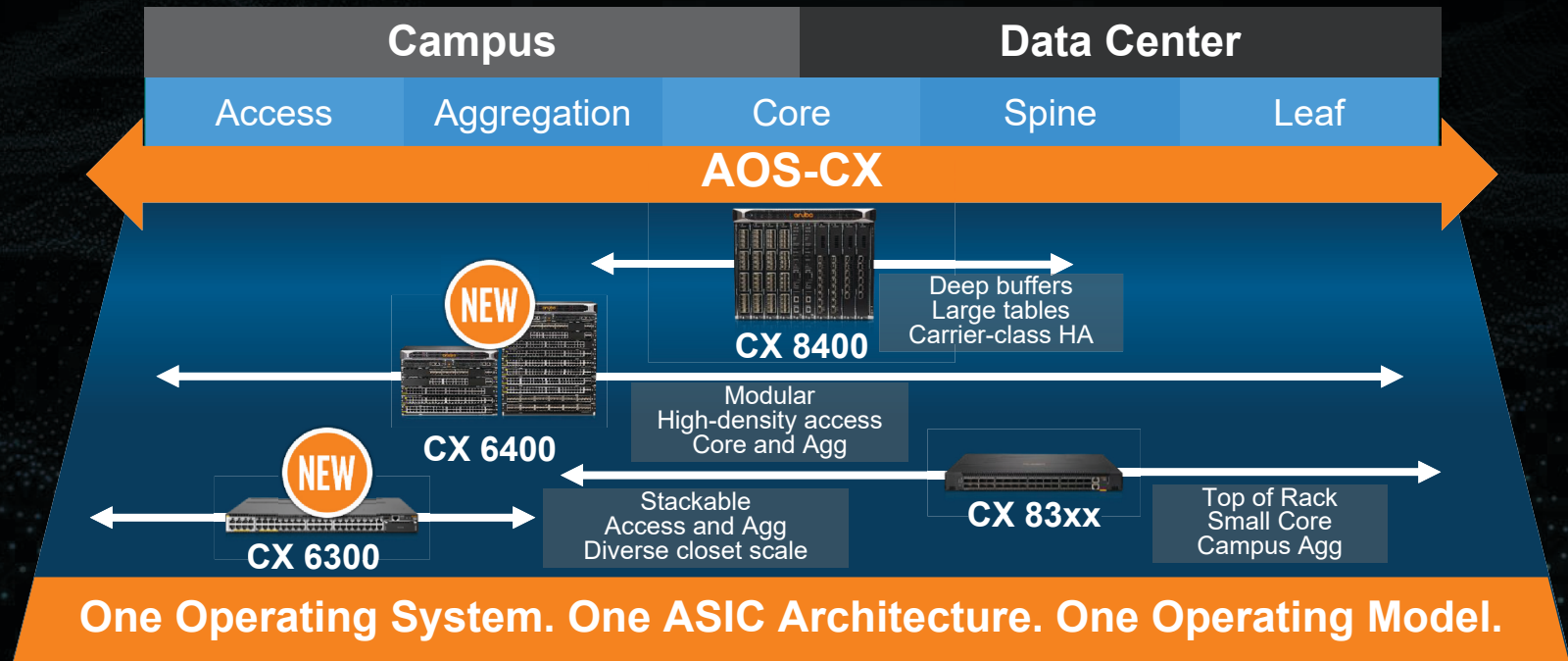
Extending the monitoring power of NAE

–New Scripts

- Application Health
- Dynamic Segmentation Health
- Client Services Health
- L3 Network Health
- L1/L2 Network Health (physical network)
- L1/L2 Network Health (Protocols)
- Device Health (hardware)
- Device Health (software)

ARUBA CX SWITCHING FOR THE ENTERPRISE

NEW PLATFORMS COMPLETE END-TO-END SWITCHING PORTFOLIO



New Switching Platforms

Performance, Scale and High Availability

Aruba 6300 Series

- 7 modular switches
- 4 fixed switches
- 3 ASICs
- 1 operating model



50G
Uplinks

Up to 10
Unit stacking

2880W
PoE

Future ready: 50G Uplinks, 880G capacity, 200G stacking

Flexible scalable: VSF Stacking for ease of management & collapsed architecture

Built for WiFi 6: SmartRate on all ports, 60W always-on PoE, Dual Power supplies for HA

Real-time Insights: Embedded Analytics in every node from NAE For rapid troubleshooting

Highlights

- Aruba 6300M Models: modular PSUs and fans – fixed ports
 - Aruba 6300F Models: fixed PSU, fans and ports
 - Gen 7 family of ASIC
 - VOQ: Virtual Output Queueing
 - PoE: Class 3, 4 and 6 – Always-on and Quick PoE
-
- AOS-CX Operating System
 - Multi-VRF
 - Full REST API
 - Network Analytics Engine (NAE)
 - NetEdit 2.0
 - VSF Stacking
 - Suitable for campus access and small campus/branch core

One Operating System. One ASIC Architecture. One Operating Model



Modular & Fixed Models



↑
Fan Tray

↑
Fan Tray

↑
Power Supply

↑
Power Supply



↑
Fans

↑
Power Inlet

Introducing the Aruba 6300 Switch Series



Modular Sku's

- 48 port Smart Rate .bt + 4xSFP56
- 24 port Smart Rate .bt + 4xSFP56
- 48 port 1G PoE .at + 4xSFP56
- 48 port 1G + 4xSFP56
- 24 port 1G PoE .at + 4xSFP56
- 24 port 1G + 4xSFP56
- 24 port (SFP+) + 4xSFP56

Fixed Sku's

- 48 port 1G PoE .at + 4xSFP56
- 48 port 1G + 4xSFP56
- 24 port 1G PoE .at + 4xSFP56
- 24 port 1G + 4xSFP56

- AOS-CX running on 7th gen. HPE ASIC
- Full density Smart Rate & 60W 802.3bt PoE
- Dual Modular PSU & Fans: "M" Switches
- Fixed 4 x 1/10/25/50G Uplinks
- 24p SFP+ Aggregator model
- Full Layer 3 with VRF
- Network Analytics Engine built-in
- NetEdit configuration automation & verification

Full Featured Enterprise Campus Access & Aggregation

Aruba OS CX | Full Layer 3 | NAE | NetEdit | Dynamic Segmentation | Full API coverage

New Switching Platforms

Performance, Scale and High Availability

Aruba 6400 Series

- 5 access line cards
- 3 core/agg line cards
- 2 chassis options
- 1 operating model



15x more
bandwidth

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TECH TALK LIVE

100% higher
Multi-gig density

30% higher
PoE density

Future ready: Up to 2.8Tbit per slot & 20Bpps, 1G to 100G interfaces

Remarkable scale & flexibility:
From 1G PoE to 28T Core

Built for WiFi 6:
SmartRate and 60W PoE-enabled

High availability: Live upgrades with VSX, redundant hot swappable Power supplies and fans

Data center class: Non-Blocking, Distributed architecture without oversubscription

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Introducing the Aruba 6400 Switch Series



Access Line Cards

- 48 port 1G PoE .at
- 48 port 1G PoE .at + 4xSFP56
- 48 port 1G PoE .bt + 4xSFP56
- 48 port 1G + 4xSFP56
- 48 port Smart Rate PoE .bt + 4xSFP56
- 24 port 10G + 4xSFP56

Core/Agg Line Cards

- 48 port 10/25
- 12 port 40/100G
- 24 port (SFP+) + 4xSFP56

- AOS-CX running on 7th gen. HPE ASIC
- 5 & 10 slot chassis (7 RUs / 12 Rus)
- Full density Smart Rate & 60W 802.3bt PoE
- Half-width Management Modules
- Every flavor of PoE, 10/25G agg, 100G Uplinks
- Combo line cards with uplinks: 4x 1/10/25/50G
- Full Layer 3 with VRF
- Network Analytics Engine built-in
- NetEdit configuration automation & verification

Full Featured Enterprise Campus Access & Aggregation

Aruba OS CX | Full Layer 3 | NAE | NetEdit | Dynamic Segmentation | Full API coverage

6405 & 6410 Chassis

- Aruba 6405 Switch (R0X26A) – 7 RU
- Aruba 6410 Switch (R0X27A) – 12 RU

	6405 Chassis	6410 Chassis
Management Slots	2	2
Power Supply bays	4	4
Fan tray bays	2	4
Line card slots	5	10
Gen 7 Fabric ASICs	1	2

- Aruba 6405 48G CLS4 PoE /4SFP56 Switch bundle (R0X28A)
- Aruba 6405 96G CLS4 PoE /4SFP56 Switch bundle (R0X29A)
- Aruba 6405 48SFP+ /8SFP56 Switch bundle (R0X30A)

6405 Switch Chassis



SFP28 / SFP56 / QSFP28

- SFP28 & SFP56

- Same form-factor as SFP+
- Specific transceivers (different signaling)
- SFP28 enables speeds of 25Gbps over fiber and special copper DACs
- SFP56 enables speeds of 50Gbps* over fiber and special copper DACs

- QSFP28

- Same form-factor as QSFP+
- Four SFP28 lanes
- QSFP28 enables speeds of 100Gbps over fiber and special copper DACs

Power Management Overview

- **Always-On PoE**
 - Supported in 10.4
 - Continues providing power to PD during reboot (for example: software upgrade)
 - May not work during:
 - Software upgrades in which FPGA must be rebooted (some major releases)
 - Uncontrolled events
- **Quick PoE (future)**
 - Starts providing power to PD in parallel to boot process (as soon as the switch is powered)
 - Availability: 10.5

Aruba 64xx/63xx Capabilities (10.4)

Access / Collapsed Core & Aggregation

Category	6300	6400
HW Tables (Arp/ND, v4/v6 routes)	ARP/ND Table Shared IPv4/IPv6 Route Table Shared	ARP/ND Table Shared IPv4/IPv6 Route Table Shared
IPv4 Routes (System)	64,000	64,000
IPv6 Routes (System)	32,000	64,000
VRF's	64	64
OSPF Areas (v2/v3)	128	128
OSPF Interfaces	128	128
OSPF Neighbors	128	128
BFD Session	128	128
BGP Neighbors	64	64
ARP	32,000 (1)	32,000 (1)
MAC	32,000 (1)	32,000 (1)
ND	32,000 (1)	32,000 (1)



1. This is the maximum under ideal conditions – testing still in progress

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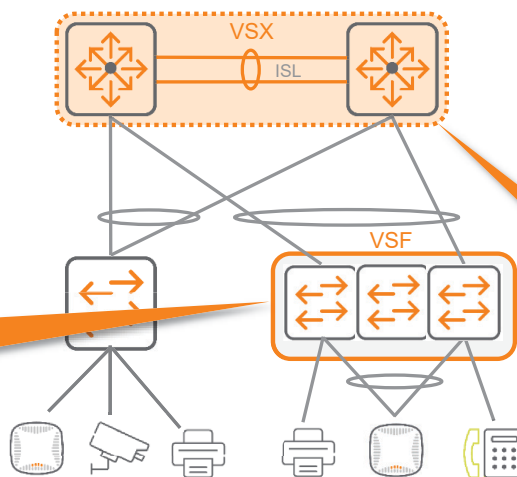
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AOS-CX Switch Virtualization Solutions

VSF for Access / VSX for Agg-Core

VSF - 6300

- Single control plane with database on master maintaining configuration for all members
- Single data plane
- Operational simplicity – one configuration for the stack
- Ideal for campus access use cases
- Up to 10 members per stack



VSX

8320/8325/6400/8400

- Dual control plane
- Dual management plane with “opt-in” configuration synchronization
- Live Upgrade
- Ideal for high density access, aggregation, core
- 2 members

VSX Live Upgrade

Update-software Enhancements in 10.3 (reminder)

- **Graceful shutdown of protocols during VSX upgrade**

- OSPF, BGP, VRRP protocols on the Secondary and Primary will gracefully shut down and notify their partners to use the peer device for forwarding and then go for a reboot.
- This method will help reducing downtime by avoiding in-flight traffic loss when the device is rebooting and links drop.
- This enhancement mechanism starts between image download and reboot.
- Partial support starting in 10.03.0001
- **Benefit:** drain traffic out of the uplink of the “to-be-rebooted” switch and achieve no packet drop on upstream ROP.

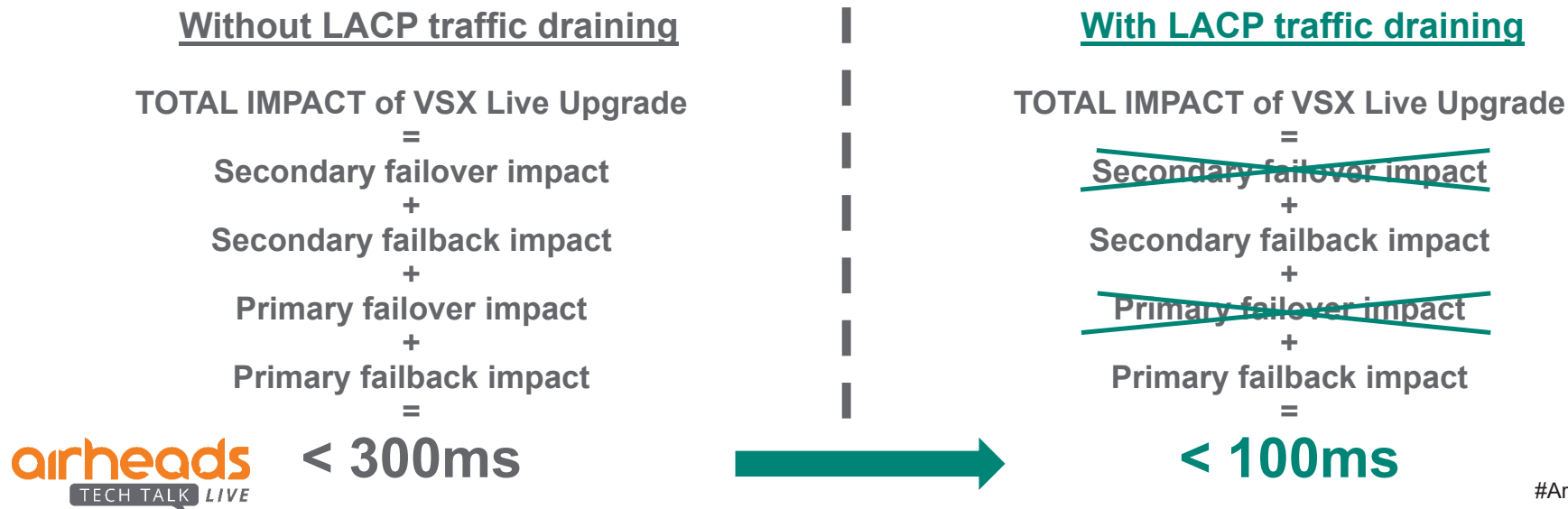
- **Links UP optimization (specific to update-software)**

- After switch is rebooted, ports which are members of VSX LAGs, are turned ON through an optimized mechanism to maximize uptime during the upgrade.

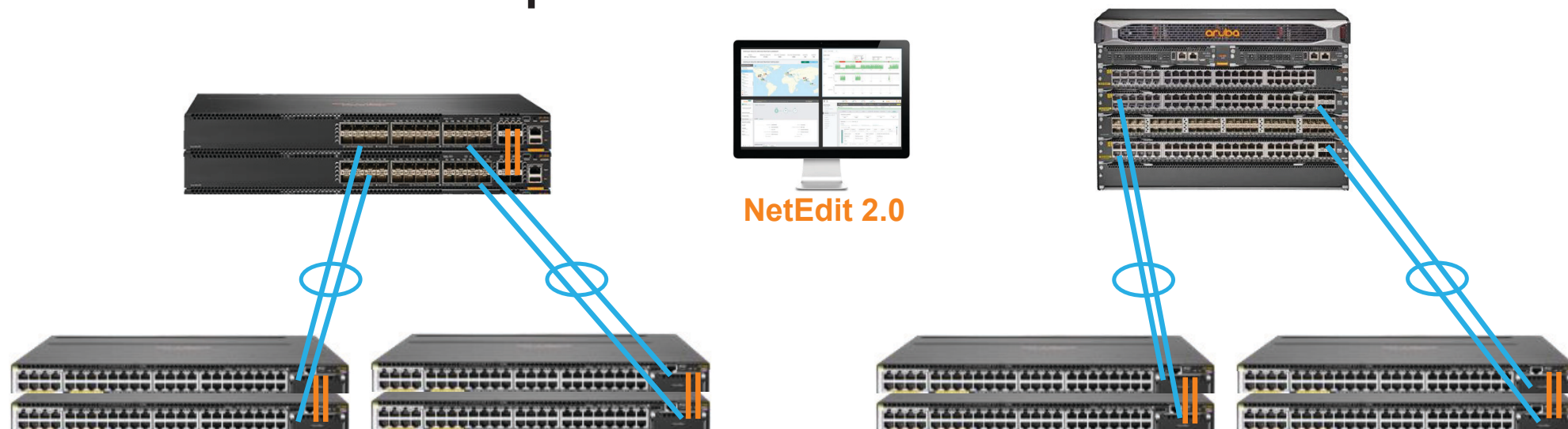
VSX Live Upgrade

Update-software Enhancements in 10.4: LACP traffic draining

- LACP traffic draining feature is specifically implemented to support VSX update-software.
- The objective is to minimize downtime close to zero by avoiding in-flight traffic loss when the device is rebooting and links drop.
- As for protocol graceful-shutdown, this mechanism starts between image download and reboot.
- No configuration is required as automatically part of the VSX Live Upgrade orchestration.

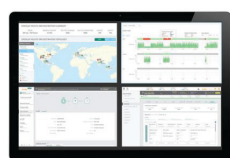


Small / Medium Campus 2-tier

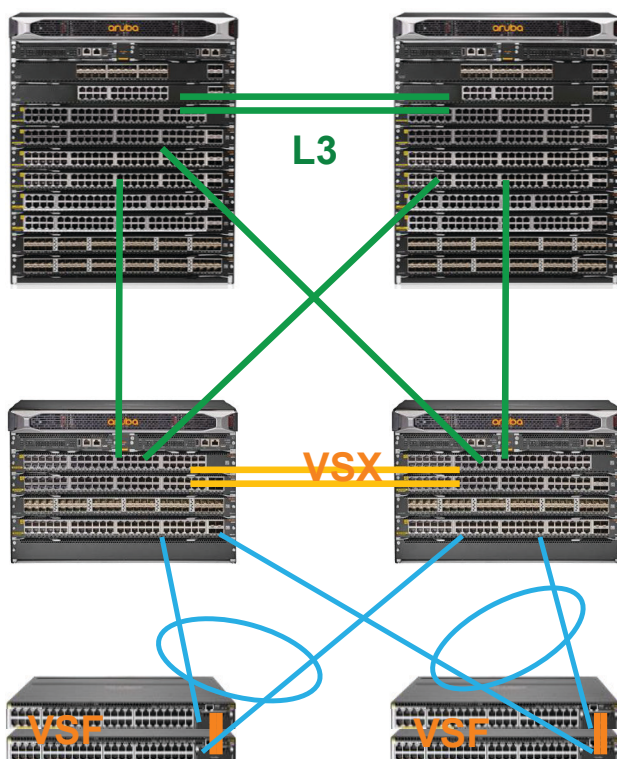


	Small	Small / Medium
Collapsed Core / Agg	6300M 24-SFP+ or 10GBT + 4 SFP56 in VSF	6405 Switch Chassis (single or two in VSX) 6400 24-port 10GBT or SFP+ /4SFP56 Modules
Access	6300F models in VSF	6300F or 6300M models in VSF (or 6405 with access modules)
Management	NetEdit 2.0	NetEdit 2.0
Mobility	Aruba IAP or Controller-based Mobility	Aruba IAP or Controller-based Mobility

Medium / Large Campus 3-tier

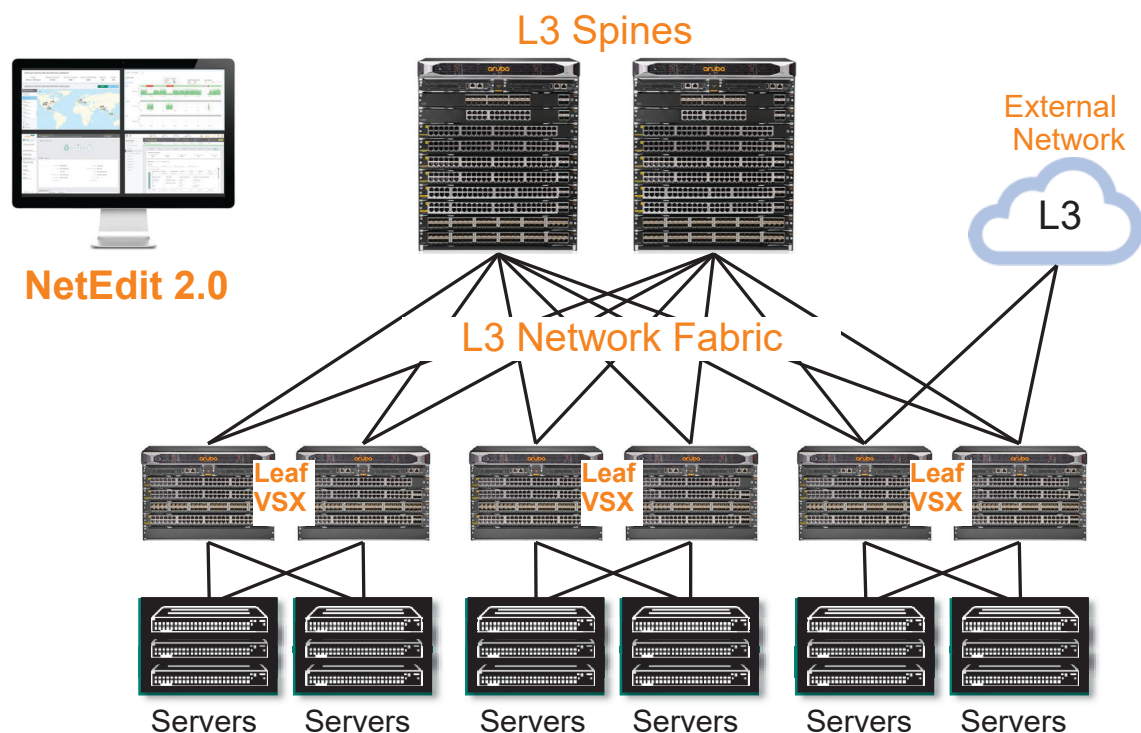


NetEdit 2.0






Position	Product
Core	6410 with Core Line cards or 8400
Aggregation	6405 with 10G SFP+ Line cards 6410 with Core Line cards
Access	6300F or 6300M models in VSF
Management	NetEdit 2.0
Mobility	Aruba Controller-based Mobility Cluster connected to dedicated aggregation

L3 Spine / Leaf POD in the Data Center



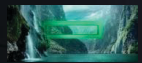
Position	Product
L3 Spines	6410 with Core Line cards or 8400
Leaf	6405 with 10G SFP+ Line cards 6410 with Core Line cards 8325 VSX
Border Leaf	6405 with 10G SFP+ Line cards 6410 with Core Line cards 8325 VSX
Management	NetEdit 2.0

Different hardware scenarios

	Access	Aggregation	Core	Datacenter	
Aruba 6300 Series 	48p 1Gbase-T Class 4 PoE Up to 480 ports 48p 1Gbase-T Class 6 PoE Up to 480 ports 48p Smart Rate Class 6 PoE Up to 480 ports	24p SFP+ Model Up to 240 ports	24p SFP+ Model Up to 240 ports	24p SFP+ Model Up to 240 ports	
Aruba 6400 Series 	48p 1Gbase-T Class 4 PoE Up to 240 ports 48p 1Gbase-T Class 6 PoE Up to 240 ports 48p Smart Rate Class 6 PoE Up to 240 ports	24p SFP+ Module Up to 120 ports 24p 10Gbase-T Module Up to 120 ports 48p 1/10/25 SFP28 Module Up to 240 ports	24p SFP+ Module Up to 120 ports 24p 10Gbase-T Module Up to 120 ports 48p 1/10/25 SFP28 Module Up to 240 ports 12p 40/100G QSFP28 Module Up to 60 ports	24p SFP+ Module Up to 120 ports 24p 10Gbase-T Module Up to 120 ports 48p 1/10/25 SFP28 Module Up to 240 ports 12p 40/100G QSFP28 Module Up to 60 ports	Tor MoR EoR
Aruba 6400 Series 	48p 1Gbase-T Class 4 PoE Up to 480 ports 48p 1Gbase-T Class 6 PoE Up to 480 ports 48p Smart Rate Class 6 PoE Up to 480 ports	24p SFP+ Module Up to 240 ports 24p 10Gbase-T Module Up to 240 ports 48p 1/10/25 SFP28 Module Up to 480 ports	24p SFP+ Module Up to 240 ports 24p 10Gbase-T Module Up to 240 ports 48p 1/10/25 SFP28 Module Up to 480 ports 12p 40/100G QSFP28 Module Up to 120 ports	24p SFP+ Module Up to 240 ports 24p 10Gbase-T Module Up to 240 ports 48p 1/10/25 SFP28 Module Up to 480 ports 12p 40/100G QSFP28 Module Up to 120 ports	Tor MoR EoR

ARUBA CX ECOSYSTEM

Services & Support



HPE Greenlake
for Aruba



HPE Pointnext
Global Services



Aruba High-Touch
Services



Aruba Customer-First
Customer-Last Support

Community Engagement

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COMMUNITY

ARUBA SOLUTION
EXCHANGE

Automation Ecosystem



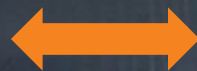
RED HAT
ANSIBLE
Automation



python

GitHub

Aruba NetEdit



Aruba CX Switching Portfolio



CX 6300



CX 6400



CX 8400



CX 8325

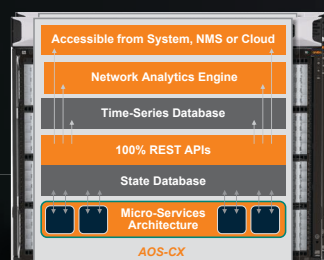
CX 8320

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ARUBA CX SWITCHING

NEXT-GEN, CLOUD-NATIVE SWITCHING DESIGNED FOR THE NETWORK OPERATOR

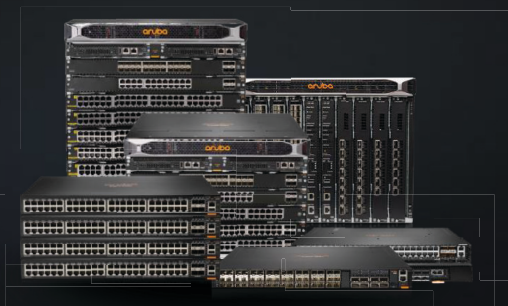
AOS-CX



Cloud Native

Modern, microservices architecture for full network programmability and workflow automation

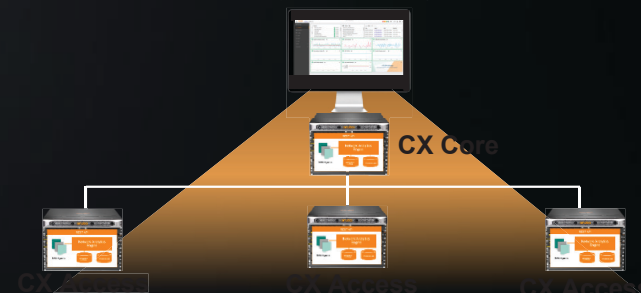
Aruba CX Switches



Edge Access to Data Center

Flexibility to deploy same hardware and software for a consistent operational experience from edge access to data center

NetEdit and Network Analytics Engine



Distributed Analytics

Analytics in every node for network-wide, real-time insights to proactively detect, and resolve issues



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TECH TALK *LIVE*

Thank You